

and which caused his detention upon the way for nearly a fortnight, he took a severe cold, from the effects of which he never completely recovered. A harassing cough set in, accompanied by all the symptoms of pleuro-pneumonia, which were followed, about the middle of December, by those of hectic fever, under which he gradually sank, three months after the operation.

Soon after Mr. Gracey reached home, a small fungus was noticed in the course of the lower angle of the wound, which gradually increased in size, was very red and painful, occasionally bled a little, and obstinately resisted every effort that was made to heal it by his physicians, Drs. Carson and Champion. The latter of these gentlemen writes thus in relation to my patient's general illness:—

"When Mr. Gracey got home, he had a severe cough, which he thought depended upon cold he had caught in descending the Ohio River. The cough continued to increase, becoming more and more annoying, and was soon followed by severe pains, of a pleuritic character, in the chest. These pains frequently lasted for hours at a time, and generally required morphia for their relief; in the intervals, the lungs were always much embarrassed, the respiration being quick and hurried. His suffering, in fact, was constant; he had no appetite, and could not sleep, except when under the influence of anodynes. He became excessively emaciated, and a few days before he expired his reason gave way."

It is to be regretted that no *post-mortem* examination was made, as this would, at once, have revealed the true state of the thoracic viscera, and shown whether there was any cancerous disease at the side of the fungus, or elsewhere. If Mr. Gracey really had pleuro-pneumonia, as was supposed by his attendants, and if this disease, contracted while he was detained on board a steamboat, was neglected, it is not improbable that the fungous growth was not of a specific character, but the effect merely of ordinary unhealthy action.

The neck and glenoid cavity of the scapula were perfectly sound, as were also the various muscles connected with the tumour, the posterior surface of which was covered by the spinate muscles, in a state of great expansion and attenuation. The morbid mass weighed seven pounds and two ounces immediately after its removal, and belongs to the kind of structure, usually, though vaguely, denominated osteo-sarcomatous.

ART. VII.—*Medical Topography, Climate, Diseases, &c. of Monterey, California.* By W. S. KING, M. D., Assistant Surgeon, U. S. A.

Forty leagues from San Francisco, and upon the shores of Monterey Bay, is situated *Monterey*, probably the most beautiful village on the coast of California. In all that constitutes beauty of scenery, derived from a proper proportion of woodland, water, hills, and distant mountains, Monterey will bear

a comparison with other places of more celebrity, and its claims, in this respect, are acknowledged by all travellers. The houses (mostly adobe) are built on a broad gentle slope of land (about two miles from Point Pinos), the southern extremity of the bay. They are scattered over an extent of three-quarters of a mile, and, mirrored in the placid waters of the bay, stand in bold relief against a background of extensive forest. The hills in the rear increase in height as they run to the south-east, till, at a distance of forty miles, they are merged in the high mountains of the coast range. The northern shore of the bay is twenty miles distant, bending so far to the west, that the Pacific is not visible from any part of the town. The peninsula, intervening between the bay and the Pacific shore, is covered by a fine growth of tall and stately pines, with a few scattering oak-trees. About a hundred yards from the southern shore of the bay, on a level with it, and skirting the western edge of the town, is a low flat sandy plain, in the centre of which is a lagoon, near half a mile in length by one-eighth in breadth. During the prevalence of the high tides in the spring, the water of the bay flows into this lagoon and keeps it full; but, at other seasons, particularly at the latter part of the dry season, the water of the lagoon recedes towards the centre, leaving a good deal of vegetable matter exposed to the action of the sun, the odour from which is far from agreeable when sufficiently near to inhale it. The water of this lagoon is so brackish at all seasons of the year that cattle will not drink it. Farther to the north and east in the same plain, and nearly parallel with the shore of the bay, are two other lagoons of a larger size, at a distance of one and two miles from the town. At the eastern edge of this last lagoon, the land rises gradually by a continuous elevation about six miles, and from thence by a gradual descent to the Salinas River, a large stream emptying into the bay about ten miles from Monterey. Beyond this river are what is called the Salinas Plains, a broad level prairie of nine miles in width, extending to the San Juan Mountains.

Three miles south of Monterey is the Rio de Carmel Valley, watered by a river of the same name, which empties into Carmel Bay. The soil of this valley is rich and alluvial, adapted to agriculture. This valley and the Salinas Plains are the only points under cultivation near Monterey. Just beyond Carmel River is Point Lobos, a promontory on the coast, celebrated for the number of seals and sea-lions always to be found there.

Monterey redoubt, a few hundred yards to the north of the town, is placed upon an elevation of one hundred and forty feet above the bay. It is surrounded by a picket-work, and incloses a sufficient area for a parade-ground and a garden for the use of the troops.

On the side of the redoubt next the bay is a battery mounting twenty heavy guns. The quarters for the officers and men are built of logs neatly plastered and whitewashed, and are commodious and comfortable.

As the climate and character of disease at the fort and town of Monterey

are precisely alike, it will be understood that both are included in my remarks. The population of Monterey is from six to eight hundred, three-fourths of which are native Californians.

Climate.—The atmosphere is humid, temperature agreeably warm and equable; the prevalent winds are sea-breezes from the west and north; the land-winds from the east and south are much less prevalent, blow less strongly, and can frequently only be detected by the uncomfortable feelings they produce. There is one rainy season from November till April. This is about the average time the rains begin and terminate, although sometimes considerable rain will fall as early as October and continue until May. During this period there are frequent intervals of fine weather, of such extraordinary beauty and balmy temperature that travellers arriving on the coast might well imagine, with Colonel Fremont, that it resembled the climate of southern Italy.

During the dry season, the fogs rise from the sea late in the afternoon, float over the town and disperse usually by 9 P. M.; there is also a fog generally in the morning until 10 o'clock A. M. I may add here that these fogs are found on the entire coast of California as far south as Point Conception. In the rainy season, at which time the winds are from the south and east, there are no fogs; the sky, when not raining, being clear and cloudless. To give some idea of the temperature at Monterey, the following memoranda, extracted from the Meteorological Register of the Post is here inserted:—

Mean annual temperature for the year 1850	. . .	55.00°
Coldest day, March 25 (mean for the day),	. . .	39.00
Warmest day, Sept. 18, “ “	. . .	77.50
Highest range, September	. . .	94.00
Lowest range, December	. . .	30.00
Mean temperature for 1851	. . .	57.54
Coldest day (mean for the day)	. . .	46.50
Warmest day “ “	. . .	73.50
Highest range, August	. . .	75.00
Lowest range, December	. . .	40.00

There is a difference between the mean temperature of summer and winter months of only from six to seven degrees, and hence the annual temperature is very uniform, although the diurnal changes may be considerable.

Diseases.—I have little knowledge of the diseases of this neighbourhood previous to my arrival at Monterey in the spring of 1849. In 1844, I am informed the smallpox visited this place, carrying off a large number of the inhabitants, chiefly Indians, who had not been vaccinated. At some of the Missions in California at the same period, nearly the entire population died from the same disease.

I do not know that any particular disease can be said to be epidemic to this location. The diseases from which the inhabitants are entirely free, are con-

tagious or infectious fevers (except the exanthemata), calculus, diabetes, and rabies; those from which they are nearly exempt are consumptions, dyspepsia, aneurism, and malignant tumours; and those which are mild and of rare occurrence are diarrhœa and dysentery. On my arrival at Monterey in 1849, I found whooping-cough and measles of a mild form prevailing in the town. On inquiry, I learned that these diseases were unknown here previous to the arrival of the Americans in 1846, who brought them from the States. A few cases of these complaints occurred here the following year, since which time they have disappeared; and, owing to the peculiar climate, and the prevalence of the strong and constant winds from the ocean, I do not believe they will reappear until imported *de novo*. During their prevalence, some cases of rubeola so much resembled scarlatina, that it was extremely difficult to distinguish one from the other. Some cases of scarlatina were reported to me, but I am unable to say whether they were genuine or not, not having seen them. So far as I was acquainted (and my practice was very general throughout the town), but very few cases proved fatal.

My predecessor, Dr. Murray, U. S. A., has reported several cases of typhoid fever in Monterey in the fall of 1847. These cases occurred among recruits just arrived from a protracted sea-voyage, and were no doubt attributable to the long confinement on shipboard, and the want of a proper supply of fresh and wholesome food. Since that period to the present time, I am not aware of any instance of this fever except one in an emigrant who arrived at Monterey overland, after enduring incredible hardships and sufferings, and who died shortly after his arrival.

Although, now and then, intermittents are met with here, yet in every instance, according to my experience, they were found among recruits who had contracted the disease elsewhere, or, miners who had been living in the valleys of the Sacramento and San Joaquin, where the disease prevails extensively, and who have come here for the benefit of their health. Off from the coast, as far interior as the Salinas River, a few cases are met with, but I have never known a case of intermittent fever *originating* in Monterey. The only epidemic common here is influenza, and in the autumn particularly, when the winds commence to blow from the land (which they usually do a short time before the advent of the rain) nearly the entire population become affected. I am inclined to believe that owing to the situation of the lagoons, already described, if it were not for the setting in of the rains shortly after the commencement of the land-breezes, Monterey would be much more unhealthy, it being to the leeward of the lagoons, and, therefore, exposed to any injurious influence emanating therefrom.

To the unfavourable influence of these winds the inhabitants are accustomed to ascribe an unusual feeling of discomfort and want of energy felt at this time. As many of the people live in low adobe houses, without board floors, and in many instances without windows, the only means of egress being a very low doorway, it will follow as a matter of course that these

dwelling will be low, damp, and badly lighted and ventilated. If to these causes be added coarse and badly cooked food, and the practice of the whole family sleeping in one apartment, it will not be surprising that, as a result of this mode of life alone, scrofula and summer complaint of children, and diseases of the lungs, will occasionally be found, without supposing anything in the climate disposing to the complaints. Scrofula is a disease of rare occurrence; the two latter are more common. More children die of cholera infantum and lobular or infantile pneumonia than from any other disease. These affections, as I have before observed, are produced more by modes of living than to any climatic agency. It is the custom among all classes of native Californians to clothe their children very scantily until they attain the age of four or five years. Before this period no shoes or stockings are used, the only garment worn being a short single petticoat of thin calico, and often, indeed, they are without any clothing whatever. During the rainy season, the lower extremities of the children are continually cold and damp, and as fireplaces and chimneys are unknown, their garments are seldom dry, and, in this condition, they usually sleep on mats laid on a ground-floor. To these causes are to be ascribed the catarrhal affections so common to children, and pleurisy met with frequently in adults.

Asthma is a disease of rare occurrence in Monterey or in California; I have seen but two cases in three years. The Asiatic cholera has not as yet visited this place. During the season that cholera prevailed in California, it began in Sacramento Valley; we find it in San Francisco next, and proceeding to San Jose, passing in a southerly direction to the eastward of Monterey, to San Louis Obispo and Santa Barbara. None of the premonitory symptoms of this epidemic were ever present at this place. To what cause this exemption from this wide-spreading epidemic is due, is involved in mystery. But two cases of diarrhoea and dysentery are reported in my returns of sick for the past year. It will be inferred from the foregoing sketch of the diseases of this port and vicinity, that it is a position enjoying a high degree of salubrity, and also from the fact that there are no diseases of peculiarity or importance that prominence can be given to any class of affections, or any points of striking character can enter into this account.

Before closing this paper with a brief allusion to some of the diseases of females of this region, I will barely allude to one peculiarity I have observed in the diseases, not only in Monterey, but in all California, and that is, the extreme tendency to functional disturbance of the brain. What I allude to is, the fact that in diseases, often of a mild character, which elsewhere and in similar circumstances are unattended by the slightest mental aberration are, in California, often accompanied by impaired intellect, and sometimes delirium. It is owing, I think, to this peculiarity, that delirium tremens is found to follow very slight excess in drinking, which I before supposed to be entirely inadequate to produce this affection. A contrary opinion I am aware exists to some extent here, but I believe it is founded in error, and that all who have

studied this subject will agree with me, that no one can indulge in the use of spirituous liquors with the same impunity in California as elsewhere.

Insanity, it is well known, is very frequent in California, where, it is true, the predisposing causes exist to an unusual extent, in the excited condition of the country; but how much is due to the influence of climate remains yet to be determined. In this small town are five cases of confirmed insanity of long standing.

Diseases of Females.—The diseases peculiar to females are far more common in Monterey than any other class of disorders. Of these, the most usual are leucorrhœa, prolapsus uteri, and deranged menstruation. Those affections are more numerous in proportion to the population in Monterey than in any community I have ever known.

The two first mentioned are, I believe, owing to the mode of treating parturient women practised by the natives of this place. It is the custom in Monterey, when labour begins, to place the woman on a chair in the middle of the room; a rope is fastened to the rafters above her head, which she is directed to pull. Round her abdomen a broad towel or rebosa is passed, the ends crossed behind, and intrusted to assistants, who are instructed to tighten it when the abdominal tumour descends during the pain, and *delay there* (as it were) until the arrival of the next, when it is hauled *back* again, so as to hold on each time to the progress made, and not permit the usual ascent of the tumour after the subsidence of the pain. With the same view, a strong man is frequently seated behind the woman, who, with his hands placed on her abdomen, makes strong pressure downwards at each pain, with the idea of assisting, by mechanical force, the contractions of the uterus. All this time, the midwife (generally some old woman) is seated in front with one, and, if possible, both hands in the vagina, making all the traction in her power. When the woman and assistants are somewhat fatigued, she is placed upon her knees on the floor, but without relaxing any of the means and appliances which would cause them to lose the advantage already gained.

These measures often prove fatal to both mother and child; usually, on the termination of the labour, the female is completely exhausted. From the injury done to the soft parts by the long and rough handling, ulceration and inflammation often ensue; thus laying the foundation of uterine and vaginal diseases, with displacement of the uterus.

Immediately after the delivery, and when the poor woman is nearly worn out, and in a more or less excited state, and the nervous system in an exceedingly susceptible condition, and disposed to receive strong impressions from slight causes, it is the universal custom for all acquaintances, however slight, to visit, with one accord, the new mother; so that her room will resemble an evening party; being filled with numerous guests, who do not hesitate to sit for hours, in loud conversation, and regale themselves in smoking paper cigarettes. When we consider how much lying-in women often suffer from not being kept in a tranquil and quiet state after confinement, and how important to her well-

doing is rest and exclusion of company, we may readily conceive the unfortunate result of an opposite course, and understand why more untoward circumstances happen with such women here than ordinarily.

Within the last four years, the influence of the intelligent physician, and a few American families, have made some improvement in these matters; but, as this part of the profession is still in the hands of the California midwife, much ignorance and superstition still exist throughout the country, to an extent that could scarcely be credited in other portions of the United States.

I have heard of many cases of impaired memory charged to the influence of California climates, but I have no certain evidence that this is true; yet, judging from the complaints made by Eastern friends, and the many instances of entire forgetfulness and disregard of the strongest of earthly ties by those sojourning in California, one might readily imagine that some potent spell, like the Lethæan waters of ancient story, was exerted by the zephyrs of the Pacific coast.

Although there is nothing of peculiar interest contained in the above sketch, which is the result of a residence of more than three years in Monterey; yet, as so little is really known of that locality, I have deemed it proper to contribute something, however imperfect, to add to our information of this interesting country.

SAN DIEGO MISSION, CALIFORNIA, December 17, 1852.

ART. VIII.—*On Stomatitis Materna*. BY WILLIAM H. BYFORD, M. D.,
Professor of Theory and Practice of Medicine in Evansville Medical
College.

As its name implies, this is a disease peculiar to those who are, or who are about to be, mothers, and is attended with painful inflammation of some portion of the living membrane of the mouth. Although inflammation of the mouth is a symptom considered necessary to the full development of the disease, it must be regarded only as a symptom attending a general disorder of the whole system, or at least of some one of its constituents, perhaps the blood, which by its own peculiar modification implicates the solid parts in an action which they would not otherwise take upon themselves. This view of its pathological seat, it is believed, is the only one which will enable us satisfactorily to account for many of the phenomena presented, both in respect to the time of occurrence, and the particular solid tissues mostly affected. What this modification of the condition of the blood may be, we can only conjecture; as, in the present state of science, the investigations, which have extended only to the physical and chemical qualities of this fluid, do not afford the means of